# —Standard Valves—

## 4052-A VALVE

PENTODE.

#### SPECIFICATION.

### Cathode.

Thoriated tungsten filament. Constant voltage type.

#### Base.

American medium 5-pin.

Anode connected to top cap.

#### Dimensions.

 Max. overall length
 9" (22-9 cms.)

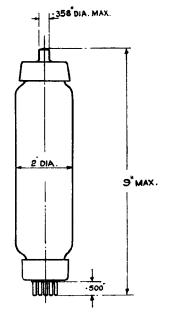
 Bulb diameter
 2" (5-25 cms.)

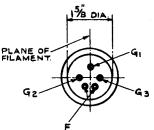
 Net weight
 0.48 lbs. (220 gms.)

#### Constants.

Filament voltage

Output capacity  $10 \mu F$ . \* at Vp = 1,250 volts Vg<sub>1</sub> = -13 volts, Vg<sub>2</sub> = 300 volts Vg<sub>3</sub> = 0





### LIMITING CONDITIONS FOR SAFE OPERATION.

7.5 volts

Maximum direct anode voltage I,500 volts
Maximum direct screen voltage 300 volts
Maximum direct suppressor voltage 45 volts
Maximum anode dissipation 60 watts
Maximum screen dissipation 20 watts
Maximum direct control grid current 10 mA.
Maximum RF control grid current 5 amps.

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### TYPICAL OPERATING CONDITIONS.

Class B Telephony		
Direct anode voltage Direct screen voltage	1,250 volts 300 volts	
Direct control grid voltage	—30 volts	
Direct suppressor voltage	0 volts 70 volts	
Peak R.F. input Anode current	70 Voits 43 mA.	
Screen current	15 mA.	
Screen resistor	60,000 ohms	
Driving power	0.5 watts	
Peak output	64 watts	
Carrier output	l6 watts	

### RADIO FREQUENCY OPERATION.

Class C Telephony — Control grid modulated		
Direct anode voltage	1,250 volts	
Direct screen voltage	300 volts —140 volts 0 volts	
Direct control grid voltage		
Direct suppressor voltage		
Anode current	42 mA.	
Screen current	10 mA.	
Screen resistor	95,000 ohms	
Control grid current	l⋅8 mA.	
Peak RF input voltage (Vg I)	160 volts	
Peak AF input volts $(Vg_t)$	60 volts	
AF power	0.75 watts	
Peak RF input power	2 watts	
Peak output	72 watts	
Carrier output	18 watts	

Class C Telegraphy Unmodulated		
Direct anode voltage Direct screen voltage Direct control grid voltage Direct suppressor voltage Anode current Screen current Screen resistor Control grid current Peak RF input volts RF input power Output	1,250 volts 300 volts —100 volts 0 volts 80 mA. 37 mA. 26,000 ohms 5 mA. 175 volts 0-9 watts 64 watts	

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Class C Telephony, Suppressor and Screen  Modulated			
	Suppressor	Screen	
Direct anode voltage	1,250	1,250 volts	
Direct screen voltage	300	300 volts	
Direct control grid voltage	<u>—</u> 100	100 volts	
Direct suppressor voltage	<del>_4</del> 5	—40 volts	
Peak AF suppressor voltage	75	75 volts	
Peak AF screen voltage	9	150 volts	
Peak RF input	175	175 volts	
Anode current	43	47 mA.	
Screen current	36	36 mA.	
Screen Resistor	25,000	25,000 ohms	
Control grid current	5	5 mA.	
RF input power	0.9	0.9 watts	
AF power	0.3	0.8 watts	
Peak output	72	84 watts	
Carrier output	18	21 watts	

